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EXAMINER

HUANG, WEN WU

ART UNIT

PAPER NUMBER

2618

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/540,573	<b>Applicant(s)</b> KOBAYASHI ET AL.	
	<b>Examiner</b> WEN W. HUANG	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18 and 20-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18 and 20-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/7/09 has been entered.

Claims 1-17 and 19 are cancelled.

Claims 18 and 20-33 are pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 33 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 33 now required the conductor of the antenna. The Examiner submits that the specification of the instant application is silent to the "conductor of the antenna". In

support of the questioned limitation, Applicant asserts that antenna 16 and (electricity) feeding point 29 are made of the same material and based on that assertion, Applicant suggests that Applicant must be possession of the teaching that antenna 16 of fig. 5 is the conductor of the antenna. However, the Examiner respectfully disagrees.

More specifically, the Examiner disagrees with Applicant's assertion that antenna 16 and feeding point 26 are made of the same material and the Examiner submits that nowhere in the specification suggests or teaches such assertion. Furthermore, the Examiner submits that antenna 16 and feeding point 29 are referenced separately. Thus, the Examiner submits that there is no basis for suggesting that antenna 16 and feeding point 29 are made of the same material.

Therefore, the claim(s) contains subject matter (the antenna conductor of the antenna) which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 18, 20-23, 25-27 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert et al. (US. 5,907,307; hereinafter "Bickert") in view of Olsson

et al. (US. 7,132,987 B1; hereinafter "Olsson"), Fehrm (US Pub No. 2003/0232628 A1) and Wong (US. 6,615,026 B1).

Regarding **claim 18**, Bickert teaches a portable telephone (see Bickert, fig. 3) comprising:

a casing (see Bickert, fig. 3, casing 30),

an antenna mounted on an end of said casing (see Bickert, fig. 3, antenna 10; col. 13, lines 38-42); and

a dielectric member having a relative dielectric constant of more than one and little loss (see Bickert, fig. 2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4);

wherein said dielectric member is directly connected to a side of said antenna (see Bickert, col. 12, lines 43-49; object 12 is placed in contact with the antenna), said side of said antenna being positioned farther away from a body of a user than all other sides of said antenna when the user is operating the portable telephone (see Bickert, col. 12, lines 49-58).

Bickert is silent to teaching that comprising

a dielectric member is directly connected to no other side of said antenna,

wherein said casing includes a lower casing on which a keyboard is disposed;

wherein said antenna is mounted on a lower end of said lower casing; and

wherein said dielectric member is directly connected to a front side of said antenna in which no other element except said casing is connected to said dielectric

member, said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone.

However, the claimed limitation is well known in the art as evidenced by Olsson, Fehrm and Wong.

In the same field of endeavor, Olsson teaches a portable telephone (see Olsson, fig. 3, mobile telephone 1) comprising a dielectric member (see Olsson, fig. 3 and 5, support elements 26 and 27, col. 4, lines 1-4) is directly connected to no other side of said antenna (see Olsson, fig. 3 and 5, antenna trace 21 and 22; col. 4, lines 17-23),

wherein said dielectric member is directly connected to a front side of said antenna in which no other element except said casing is connected to said dielectric member (see Olsson, fig. 6, col. 5, lines 5-15; connectors 28-31 to casing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson in order to improve antenna performance while in talking/operating position (see Olsson, col. 1, lines 64-67).

The combination of Bickert and Olsson is silent to teaching that  
wherein said casing includes a lower casing on which a keyboard is disposed;  
wherein said antenna is mounted on a lower end of said lower casing; and  
wherein said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm

in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Fehrm and Wong.

In the same field of endeavor, Fehrm teaches a portable telephone wherein said casing includes a lower casing on which a keyboard is disposed (see Fehrm, fig. 1, lower casing 2);

wherein said casing includes a lower casing on which a keyboard is disposed (see Fehrm, fig. 1, keyboard 8); and

wherein said antenna is mounted on a lower end of said lower casing (see Fehrm, antenna 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Fehrm in order to achieve good SAR value (see Fehrm, para. [0025]).

The combination of Bickert, Olsson and Fehrm is silent to teaching that

wherein said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein said dielectric member is directly connected (see Wong, fig. 1, dielectric 18) to a front side of said antenna (see Wong, fig. 1, antenna 12), said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding

said lower casing within the palm in order to operate the portable telephone (see Wong, fig. 1 and 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson and Fehrm with the teaching of Wong in order to maximize the reflection of energy away from the user's head (see Wong, col. 2, lines 13-15).

Regarding **claim 20**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein said casing includes an upper casing on which a speaker and a display screen are disposed (see Bickert, fig. 3, speaker 28 and display 42);

wherein said antenna is mounted on an upper end of said upper casing (see Bickert, fig. 3, antenna 10); wherein said dielectric member is directly connected to a back side of said antenna (see Bickert, col. 12, lines 43-49; dielectric object 12 can be place in contact with the antenna), said back side of said antenna being positioned farther away from a head as the body of the user when the user is holding said upper casing adjacently the head in order to operate the portable telephone (see Bickert, fig. 2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4 and col. 12, lines 49-58).

Regarding **claim 22**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein said side of said antenna



is entirely connected (see Bickert, col. 12, lines 43-49; dielectric object 12 can be placed in contact with the antenna) to and entirely covered by said dielectric member (see Bicker, fig. 8(d), col. 16, line 49).

Regarding **claim 23**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein said antenna includes a joint provided at one end of said antenna that is coupled to said casing (see Bickert, fig. 3, insert 32);

wherein said joint operates as a feeding section for feeding electricity supplied by said portable telephone to said antenna, and corresponds to a feeding section that feeds power to the antenna from said portable telephone (see Bickert, col. 13, lines 37-42 and 62-67).

Regarding **claim 25**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein the dielectric member is a dielectric member in shape of hemicylinder (see Wong, fig. 2, component 18).

Regarding **claim 26**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein the dielectric member is a dielectric member in shape of rectangular (see Wong, fig. 4, component 18).

Regarding **claim 27**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein the dielectric member has a curved surface on a side opposite to the antenna (see Bickert, fig. 2, dielectric 12, col. 11, lines 60-65, "C"-shaped).

Regarding **claim 29**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18, wherein the antenna is a dipole antenna (see Wong, col. 2, lines 49-50).

Regarding **claim 21**, Bickert teaches a portable telephone (see Bickert, fig. 3) comprising:

- a casing (see Bickert, fig. 3, casing 30),

- an antenna mounted on an end of said casing (see Bickert, fig. 3, antenna 10; col. 13, lines 38-42); and

- a dielectric member having a relative dielectric constant of more than one and little loss (see Bickert, fig. 2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4);

- wherein said dielectric member is directly connected to a side of said antenna (see Bickert, col. 12, lines 43-49; object 12 is placed in contact with the antenna), said side of said antenna being positioned farther away from a body of a user than all other sides of said antenna when the user is operating the portable telephone (see Bickert, col. 12, lines 49-58),

wherein said casing includes an upper casing on which a speaker and a display screen are disposed (see Bickert, fig. 3, speaker 28 and display 42),

wherein said antenna includes an upper antenna mounted on an upper end of said upper casing (see Bickert, fig. 3, casing 30, antenna 10),

wherein said dielectric member includes an upper dielectric member (see Bickert, fig. 2, radiation redistributing object 12);

wherein said upper dielectric member is directly connected to a back side of said antenna, said back side of said antenna being positioned farther away from a head as the body of the user when the user is holding said upper casing adjacently the head in order to operate the portable telephone (see Bickert, col. 12, lines 49-58).

Bickert is silent to teaching that comprising

a dielectric member is directly connected to no other side of said antenna,

wherein said dielectric member is directly connected to a front side of said antenna in which no other element except said casing is connected to said dielectric member,

wherein said casing includes a lower casing on which a keyboard is disposed;

wherein said antenna includes a lower antenna mounted on a lower end of said lower casing;

wherein said dielectric member includes a lower dielectric member;

wherein said lower dielectric member is directly connected to a front side of said antenna in which no other element except said casing is connected to said dielectric member, said front side of said antenna being positioned farther away from a palm as

the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone.

However, the claimed limitation is well known in the art as evidenced by Olsson, Fehrm and Wong.

In the same field of endeavor, Olsson teaches a portable telephone (see Olsson, fig. 3, mobile telephone 1) comprising a dielectric member (see Olsson, fig. 3 and 5, support elements 26 and 27, col. 4, lines 1-4) is directly connected to no other side of said antenna (see Olsson, fig. 3 and 5, antenna trace 21 and 22; col. 4, lines 17-23),

wherein said dielectric member is directly connected to a front side of said antenna in which no other element except said casing is connected to said dielectric member (see Olsson, fig. 6, col. 5, lines 5-15; connectors 28-31 to casing).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson in order to improve antenna performance while in talking/operating position (see Olsson, col. 1, lines 64-67).

The combination of Bickert and Olsson is silent to teaching that  
wherein said casing includes a lower casing on which a keyboard is disposed;  
wherein said antenna includes a lower antenna mounted on a lower end of said lower casing;

wherein said dielectric member includes a lower dielectric member;  
said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to

operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Fehrm and Wong.

In the same field of endeavor, Fehrm teaches a portable telephone wherein said casing includes a lower casing on which a keyboard is disposed (see Fehrm, fig. 1, lower casing 2);

wherein said casing includes a lower casing on which a keyboard is disposed (see Fehrm, fig. 1, keyboard 8); and

wherein said antenna includes a lower antenna mounted on a lower end of said lower casing (see Fehrm, antenna 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Fehrm in order to achieve good SAR value (see Fehrm, para. [0025]).

The combination of Bickert, Olsson and Fehrm is silent to teaching that

wherein said dielectric member includes a lower dielectric member;

said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone

wherein said dielectric member includes a lower dielectric member (see Wong, fig. 1, dielectric 18, antenna 12);

said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone (see Wong, fig. 1 and 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson and Fehrm with the teaching of Wong in order to maximize the reflection of energy away from the user's head (see Wong, col. 2, lines 13-15).

2. Claims 28, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert, Olsson, Fehrm and Wong as applied to claim 18 above, and further in view of Shoji et al. (US. 7,031,762 B2; hereinafter "Shoji")

Regarding **claim 28**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18.

The combination of Bickert, Olsson, Fehrm and Wong is silent to teaching that wherein the antenna is a built-in antenna built in the upper casing. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a built-in antenna built in the upper casing (see Shoji, fig. 9, component 50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson, Fehrm and

Wong with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

Regarding **claim 31**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18.

The combination of Bickert, Olsson, Fehrm and Wong is silent to teaching that wherein the antenna is a monopole antenna. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a monopole antenna (see Shoji, col. 2, line 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson, Fehrm and Wong with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

Regarding **claim 32**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18.

The combination of Bickert, Olsson, Fehrm and Wong is silent to teaching that wherein the antenna is a meander antenna. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a meander antenna (see Shoji, col. 2, line 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson, Fehrm and Wong with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert, Olsson, Fehrm and Wong as applied to claim 18 above, and further in view of Filipovic (US. 6,590,544 B1).

Regarding **claim 24**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18.

The combination of Bickert, Olsson, Fehrm and Wong is silent to teaching that wherein the dielectric member is a dielectric member in shape of hemisphere. However, the claimed limitation is well known in the art as evidenced by Filipovic.

In the same field of endeavor, Filipovic teaches an antenna wherein the dielectric member is a dielectric member in shape of hemisphere (see Filipovic, col. 2, lines 39-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson, Fehrm and Wong with the teaching of Filipovic in order to improve the directivity of the antenna (see Filipovic, col. 2, lines 22-23; Bickert, col. 12, lines 3-4).



4. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert, Olsson, Fehrm and Wong as applied to claim 18 above, and further in view of Harano (US PUB NO. 2002/0142794 A1).

Regarding **claim 30**, the combination of Bickert, Olsson, Fehrm and Wong teaches the portable telephone according to claim 18.

The combination of Bickert, Olsson, Fehrm and Wong is silent to teaching that wherein the antenna is an inverted-L-shaped antenna. However, the claimed limitation is well known in the art as evidenced by Harano.

In the same field of endeavor, Harano teaches a portable telephone wherein the antenna is an inverted-L-shaped antenna (see Harano, fig. 5, component 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson, Fehrm and Wong with the teaching of Harano in order direct harmful radio electromagnetic wave away from the user's head (see Harano, abstract; Bickert, col. 12, lines 3-4).

5. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert in view of Olsson and Mattsui et al. (US. 6,518,932 B1; hereinafter "Mattsui").

Regarding **claim 33**, Bickert teaches a portable telephone (see Bickert, fig. 3) comprising:

a casing (see Bickert, fig. 3, casing 30),

an antenna mounted on an end of said casing (see Bickert, fig. 3, antenna 10; col. 13, lines 38-42); and

a dielectric member having a relative dielectric constant of more than one and little loss (see Bickert, fig. 2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4);

wherein said dielectric member is directly connected to a side of said antenna (see Bickert, col. 12, lines 43-49; object 12 is placed in contact with the antenna), said side of said antenna being positioned farther away from a body of a user than all other sides of said antenna when the user is operating the portable telephone (see Bickert, col. 12, lines 49-58).

Bickert is silent to teaching that comprising  
a casing in which a power amplifier outputting transmission power is disposed,  
an antenna provided with an antenna conductor electrically connected to said power amplifier, and

wherein said dielectric member is directly connected to no other side of said antenna conductor. However, the claimed limitation is well known in the art as evidenced by Olsson and Matsui.

In the same field of endeavor, Olsson teaches a portable telephone (see Olsson, fig. 3, mobile telephone 1) comprising a dielectric member (see Olsson, fig. 3 and 5, support elements 26 and 27, col. 4, lines 1-4) is directly connected to no other side of said antenna (see Olsson, fig. 3 and 5, antenna trace 21 and 22; col. 4, lines 17-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson in order to improve antenna performance while in talking/operating position (see Olsson, col. 1, lines 64-67).

The combination of Bickert and Olsson is silent to teaching that  
a casing in which a power amplifier outputting transmission power is disposed,  
and  
an antenna provided with an antenna conductor electrically connected to said power amplifier.

In the same field of endeavor, Mattsui teaches a portable telephone (see Mattsui, abstract) comprising

a casing in which a power amplifier outputting transmission power is disposed  
(see Mattsui, fig. 1B, amplifier 109 and 111), and

an antenna provided with an antenna conductor electrically connected to said power amplifier (see Mattsui, fig. 1C, MMIC 104; col. 8, lines 56-66).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Mattsui in order to develop new antennas of small size and light weight and in order to reduce the cost of mass production (see Mattsui, col. 2, lines 54-58).

### ***Response to Arguments***

Applicant's arguments filed 8/7/09 have been fully considered but they are not persuasive.

Regarding claim 33, Applicant argues that Bickert is not directly connect to the antenna because that Bickert's dielectric member connected to the antenna casing instead of the antenna itself and that there is space between Bickert's dielectric member and the antenna itself. However, the Examiner respectfully disagrees.

More specifically, the Examiner submits that, based on the broadest reasonable interpretation of "directly connected", Bickert's dielectric member is directly connected without intervention and interference to the antenna. Furthermore, the Examiner submits the antenna casing is also part of the antenna. Thus, the Examiner submits that Bickert teaches the claimed dielectric member.

Regarding claim 18, Applicant argues that Wong is silent to teaching of "no other element except the casing is connected to the dielectric member".

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

More specifically, the Examiner submits that Olsson teaches that said dielectric member is directly connected to a front side of said antenna in which no other element

except said casing is connected to said dielectric member (see Olsson, fig. 6, col. 5, lines 5-15; connectors 28-31 to casing).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEN W. HUANG whose telephone number is (571)272-7852. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wen W Huang/

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